

Special Problem II.B-30

A receiver uses a **demodulator** that requires an SNR (at the input of the demodulator) of **at least 12 dB** to operate properly.

The **antenna noise temperature** for this receiver is 290 K°.

The **minimum discernable signal** for this receiver is -106 dBm.

The **noise figure** of this receiver is 6 dB.

Determine the **IF bandwidth** of this receiver.